

AUTOMATIC GAIN CONTROL CIRCUIT WITH MULTIPLE INPUT SIGNALS

ABSTRACT OF THE DISCLOSURE

An automatic gain control circuit in a receiver estimates an AGC gain using
5 information from an estimated amplitude signal derived from a received signal before a
carrier signal is recovered from the received signal. The carrier signal is recovered from
the received signal using the estimated AGC gain. After the carrier signal is recovered,
the amplitude of the estimated amplitude signal decreases below the amplitude of the
recovered carrier signal. The Automatic Gain Control circuit uses the amplitude of the
10 recovered I and/or Q signal to accurately set the AGC gain.